WHAT IS CLAIMED IS:

1. An Internet Protocol (IP) multicast control system, comprising:
   a first module capable of facilitating IP multicast control connections between a
   first apparatus and a second apparatus; and
   a second module capable of enabling termination of a control protocol of the first
   module and capable of being supported at an Asynchronous Transfer Mode
   (ATM) layer of the second apparatus.

2. The system of claim 1 wherein the first module is capable of being supported at the IP
   layer of the first apparatus.

3. The system of claim 1 wherein the second apparatus is subtending with respect to the
   first apparatus.

4. The system of claim 1 wherein:
   the first module is an IP Gateway Module; and
   the second module is a control protocol terminating module.

5. The system of claim 4 wherein:
   the first apparatus further includes:
   a Network Element Control Module;
   a Subtending Interface Module; and
   a Digital Subscriber Line (DSL) Interface Module; and
   the IP Gateway Module, the Network Element Control Module, the Subtending
   Interface Module and the DSL Interface Module are each interconnected.

6. The system of claim 1 wherein:
   the first apparatus further includes:
   a module capable of controlling a plurality of network elements of the first
   apparatus;

5   a module capable of supporting communication with at least one subtending

6   network node of the first apparatus; and

7   a module capable of supporting communication with at least one Digital

8   Subscriber Line (DSL) apparatus; and

9   each one of said modules is interconnected with each other one of said modules.

1   7. The system of claim 6 wherein:

2   the first apparatus includes a first Digital Subscriber Line Multiplexor (DSLAM);

3   the first DSLAM includes an IP layer;

4   the IP Gateway Module is capable of being supported at the IP layer of the first

5   apparatus; and

6   the IP Gateway Module is an network element of the first DSLAM.

1   8. The system of claim 7 wherein the second apparatus is subtending with respect to the

2   first DSLAM.

1   9. The system of claim 8 wherein:

2   the second apparatus includes a second DSLAM; and

3   the Gateway Control Protocol Terminating Module is a network element of the

4   second DSLAM.

1   10. The system of claim 1 wherein:

2   the first apparatus includes an IP Gateway apparatus including an IP layer; and

3   the IP Gateway Module is a network element of the IP Gateway apparatus.

1   11. The system of claim 10 wherein the IP Gateway Module is capable of being supported

2   at the IP layer of the IP gateway apparatus.

1   12. The system of claim 10 wherein the IP gateway apparatus and the second apparatus

2   are network nodes of a common network of network nodes.

1   13. The system of claim 12 wherein the common network operates in accordance with
2   ATM.

1   14. The system of claim 10 wherein:
2   the second apparatus includes a DSLAM;
3   the ATM layer is integral with the DSLAM; and
4   the Gateway Control Protocol Terminating Module is a network element of the
5   DSLAM.

1   15. The system of claim 10 wherein the IP gateway apparatus and the second apparatus
2   are network nodes of a first network of network nodes and a second network of
3   network nodes, respectively.

1   16. The system of claim 15 wherein:
2   the first network node operates in accordance with IP; and
3   the second network node operates in accordance with ATM.

1   17. The system of claim 10 wherein:
2   the second apparatus is a hub apparatus; and
3   a third apparatus is a subtending apparatus with respect to the hub apparatus.

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1   18. A communication apparatus, comprising:

2   a first network node including an Internet Protocol (IP) Gateway Module; and

3   a second network node including a Gateway Control Protocol Terminating

4   Module;

5   wherein the IP Gateway Module is capable of facilitating IP multicast control

6   connections between the first network node and the second network node and

7   wherein the Gateway Control Protocol Terminating Module is capable of

8   enabling termination of a control protocol of the IP Gateway Module and is

9   capable of being supported at an Asynchronous Transfer Mode (ATM) layer of

10   the second network node.

1   19. The communication apparatus of claim 18 wherein the second network node is

2   subtending with respect to the first network node.

1   20. The communication apparatus of claim 18 wherein:

2   the first network node includes a Digital Subscriber Line Multiplexor (DSLAM);

3   the DSLAM includes an IP layer; and

4   the IP Gateway Module is an network element of the DSLAM.

1   21. The communication apparatus of claim 20 wherein the IP Gateway Module is capable

2   of being supported at the IP layer of the DSLAM.

1   22. The communication apparatus of claim 20 wherein:

2   the DSLAM further includes:

3   a Network Element Control Module;

4   a Subtending Interface Module; and

5   a Digital Subscriber Line (DSL) Interface Module; and

6   the Network Element Control Module, the Subtending Interface Module and the

7   DSL Interface Module are each interconnected.

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23. The communication apparatus of claim 20 wherein:

    the DSLAM further includes:

        a module capable of controlling a plurality of network elements of the DSLAM;

        a module capable of supporting communication with at least one subtending network node of the DSLAM; and

        a module capable of supporting communication with at least one Digital Subscriber Line (DSL) apparatus; and

    each one of said modules is interconnected with each other one of said modules.

24. The communication apparatus of claim 20 wherein the second apparatus is subtending with respect to the first DSLAM.

25. The communication apparatus of claim 24 wherein:

    the first network node includes a second DSLAM; and

    the Gateway Control Protocol Terminating Module is a network element of the second DSLAM.

26. The communication apparatus of claim 18 wherein:

    the first network node includes an IP Gateway apparatus including an IP layer; and

    the IP Gateway Module is a network element of the IP Gateway apparatus.

27. The communication apparatus of claim 26 wherein the IP Gateway Module is capable of being supported at the IP layer of the IP Gateway apparatus.

28. The communication apparatus of claim 26 wherein the IP gateway apparatus and the second apparatus are network nodes of a common network of network nodes.

29. The communication apparatus of claim 28 wherein the common network operates in accordance with ATM.

1   30. The communication apparatus of claim 26 wherein the first network node and the
2   second network node are network nodes of a first network of network nodes and a
3   second network of network nodes, respectively.

1   31. The communication apparatus of claim 30 wherein:
2   the first network node operates in accordance with IP; and
3   the second network node operates in accordance with ATM.

1   32. The communication apparatus of claim 26 wherein:
2   the second network node is a hub network node; and
3   a third network node is a subtending network node with respect to the hub network
4   node.

33. A method for facilitating Internet Protocol (IP) multicast services within a deployed
network of network elements, comprising:
    implementing, at an IP layer of the first network node, functionality capable of
        controlling multicast connections between the first network node and a second
        network node an IP Gateway control protocol; and
    implementing, at an Asynchronous Transfer Mode (ATM) layer of the second
        network node, functionality capable of terminating the IP Gateway control
        protocol.

34. The method of claim 33 wherein:
    the first network node includes a Digital Subscriber Line Multiplexor (DSLAM);
    the IP layer is integral with the DSLAM; and
    implementing said functionality capable of controlling multicast connections
        includes implementing said functionality at the IP layer of the DSLAM.

35. The method of claim 33 wherein implementing said functionality capable of
controlling multicast connections includes coupling an IP Gateway Module with at
least one of:
    a Network Element Control Module,
    a Subtending Interface Module; and
    a Digital Subscriber Line (DSL) Interface Module.

36. The method of claim 33 wherein implementing said functionality capable of
controlling multicast connections includes coupling a module capable of controlling
multicast connections with at least one of:
    a module capable of controlling a plurality of network elements of a first network
        node;
    a module capable of supporting communication with at least one subtending
        network node of the first network node; and
    a module capable of supporting communication with at least one Digital
        Subscriber Line (DSL) apparatus.

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37. The method of claim 33 wherein:

    the first network node includes an IP Gateway apparatus;

    the IP layer is integral with the IP Gateway apparatus; and

    implementing said functionality capable of controlling multicast connections

        includes implementing said functionality at the IP layer of the IP Gateway

        apparatus.

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